APPLICATION FOR
UNITED STATES LETTERS PATENT

FOR

GOLF CLUB PUTTER

By:

Ronald A. Trumble and
Christopher L. Trumble

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Name: _____
Steven B. Leavitt

This application claims the benefit of U.S. Provisional Application No. 60/438,950, filed January 9, 2003.

BACKGROUND OF THE INVENTION

1. Technical Field

The present invention relates to a golf club design. More particularly, the invention relates to an improved design for a putter that reduces undesirable torque from being transmitted to the shaft of the putter.

2. Description of Related Art

Golf putters are typically designed with a club head having a generally planar face with little or no angle in relation to the ground and ball as compared to other golf clubs such as woods and irons. Virtually all putters have a putter head having a shank stemming upward toward a shaft designed to be gripped by a player's hands. To connect the shaft to the putter head, a hosel is situated to receive the terminal end of the shaft that is closest to the ground.

With many conventional putters, the centerline of the shaft fails to extend through to the centerline of the golf ball being contacted during a player's swing. Hence, a putter without any modifications is likely to be swung slightly off target because of the inertia encountered with the club's swing due to the distribution of mass throughout the club. Because of the putter's inertia, a user is likely to apply an undesired torque to the putter causing the swing to be astray.

The reason for this inertia is that the centerline in most prior art putters falls across the face of the putter's head at the heel side of the sight line. To compensate for this, many prior art putters place additional weight on the toe side of the putter head in an attempt to eliminate or at least reduce the application of torque to the putter. Because each player will have different

characteristics in size, shape, and movement, the optimal amount of weight to include on the toe side of the putter head will vary per person. Therefore, a great deal of time, money, and other resources is usually required by each player to find the best putter for that individual. An improved design obviating the need to add weight to any particular end of the putter head is needed so that the generation of unwanted club torque can be reduced or, more preferably, eliminated. As it is desirous in the game of golf to minimize the number of strokes taken for a player, an improved putter design is desired to achieve this goal.

SUMMARY OF THE INVENTION

A golf club putter in accordance with the present invention comprises a shaft for the golfer to hold the putter and a putter head affixed to a terminal end of the shaft wherein a hosel is provided at an end of the putter head for receiving the terminal end of the shaft. The putter is formed such that, at about when the putter head at a desirable contact point disposed thereon contacts a golf ball, a centerline extends through about a center of the shaft and continues on through about a center portion of the hosel. Further, the centerline, at the moment of contact of the putter head and golf ball, intersects with a sightline of the player and the golf ball. Even more preferable, the intersection of the centerline and the sightline occurs at about a point of tangency of the golf ball and a surface where the golf ball is disposed.

BRIEF DESCRIPTION OF THE DRAWINGS

The novel features believed characteristic of the invention are set forth in the appended claims. The invention itself, however, as well as a preferred mode of use, further objectives and advantages thereof, will be best understood by reference to the following detailed description of illustrative embodiments when read in conjunction with the accompanying drawings, wherein:

Figure 1 is a front elevation view of a putter head made in accordance with the present invention showing the centerline of the shaft passing through the center of the hosel and ball.

Figure 2 is an end elevation view of the putter of **Figure 1**.

DETAILED DESCRIPTION

In **Figures 1** and **2**, a bottom portion of putter **10** is shown having a putter head **20** affixed to an end **18** of shaft **12**. A hosel **16** is provided at a top end of shank **26** to receive end **18** and thereby retain the assembly in a fixed and desirable position. At a bottom end of shank **26**, heel **24** generally comprises the rear portion of putter head **20** while toe **22** generally comprises the forward portion. A face **21** is an essentially planar surface provided along the longitudinal front of putter head **20** for contacting a golf ball **30**. A rear portion **23** defines a longitudinal section of putter head **20**, which may extend outward and away in relation to a face **21**. A bottom portion **25** defines the length of putter head **20**, which is disposed above ground **40**, or other surface, when putter **10** is used in play. The shape of bottom portion **25** may be either planar or arcuate. As to the composition of the putter, any suitable standard material know to be used in the construction of golf club putters may be employed.

To obviate the need for toe **22** to have a greater weight relative to heel **24**, as provided with prior art putters, hosel **16** is configured such that centerline **14**, which passes through the center of shaft **12**, continues through the center of hosel **16**. When centerline **14** is projected to and through ground **40**, centerline **14** intersects with sightline **32** at the moment face **21** at about contact point **36** contacts ball **30** (hereafter referred to as "Moment of Intersection"). Sightline **32** is the intended line extending from the player's eyes down through the center of golf ball **30** to ground **40**. Preferably, the centerline **14** passes through the centers of shaft **12** and hosel **16** and intersects at about tangent point **34** at the Moment of Intersection. Tangent point **34** is where about the bottom of ball **30** is resting on ground **40**. In one preferred embodiment, the intersection of centerline **14** and sightline **32** at the Moment of Intersection occurs within about

0.120 inches of point **34**.

As shown in **Figure 2**, shank **26** curves downward and away from centerline **14** and ball **30** to allow the Moment of Intersection to occur as centerline **14** intersects with about tangent point **34**. Therefore, contact point **36** on face **21** is set back and away from centerline **14** by about a distance equal to the radius of the standard golf ball. Preferably, this set back distance is within about 0.120 inches of the distance equal to the radius of a standard golf ball, which for example is 0.840 inches.

While various designs of putters having putter heads that are offset are known, these prior art putters lack the advantageous design of the present invention. With the present invention, hosel **16** is configured such that centerline **14** is allowed to continue on and through hosel **16** down to about point **34** at the Moment of Intersection. Notably with prior art putters that are offset, the centerline does not continue through the center of the hosel, which is unlike the present invention. Therefore, these prior art putters relied on overcoming the torque applied to the shaft by increasing the weight of the toe of the putter head relative to the heel.

With the advantageous intersection of centerline **14** and sightline **32** of the present invention, a player no longer transmits any torque to shaft **12** or at least significantly reduces the amount of torque transmitted. As such, a player no longer needs to be concerned with compensating for this undesirable application of torque. Putter head **20** may then have toe **22** and heel **24** weighted about the same which will at least somewhat compensate for a player's swing or putt that is slightly askew to the intended target.

While the invention has been particularly shown and described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes in

form and detail may be made therein without departing from the spirit and scope of the invention.